



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

September 20, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:37 Reporting for the week ending 09/14/13 (MMWR Week #37)

CURRENT HOMELAND SECURITY THREAT LEVELS

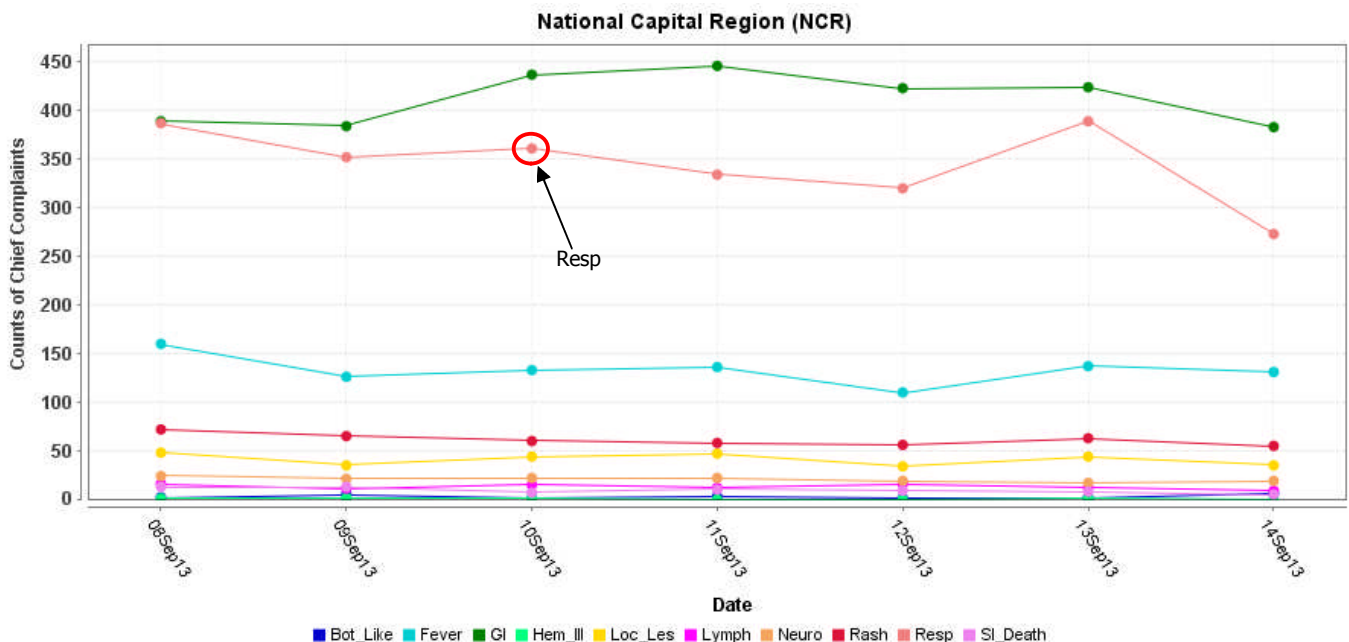
National: No Active Alerts
Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

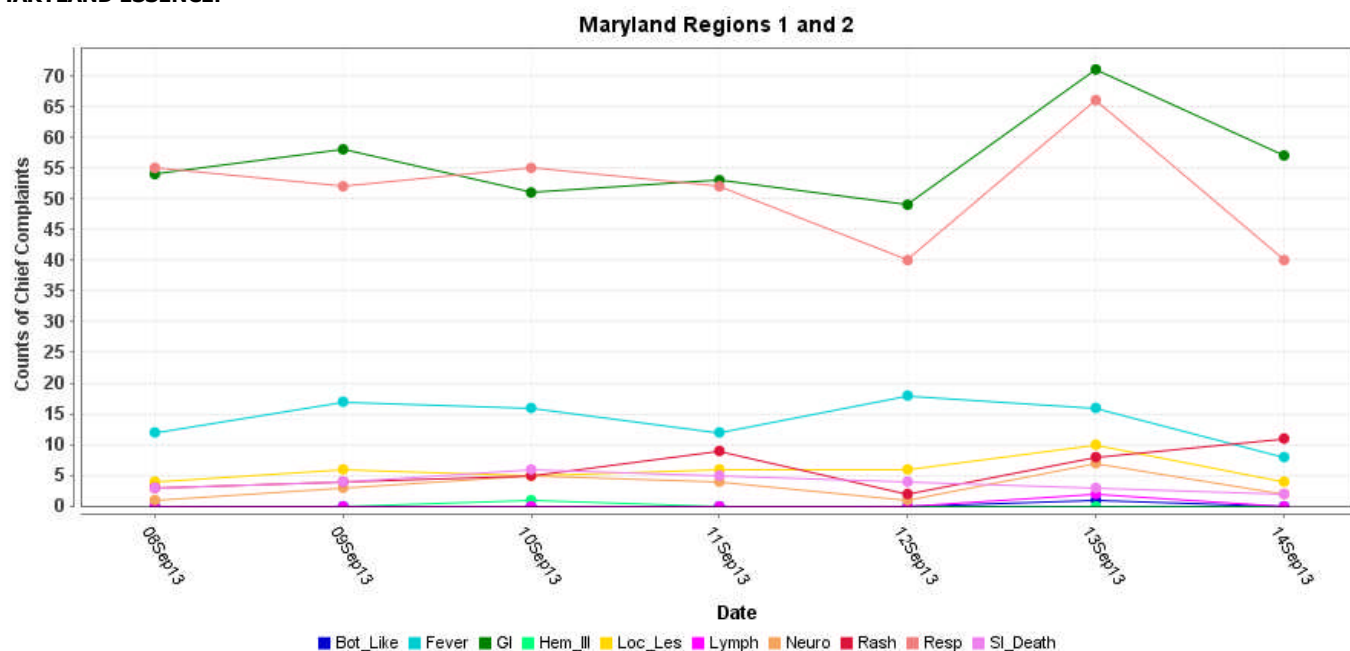
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

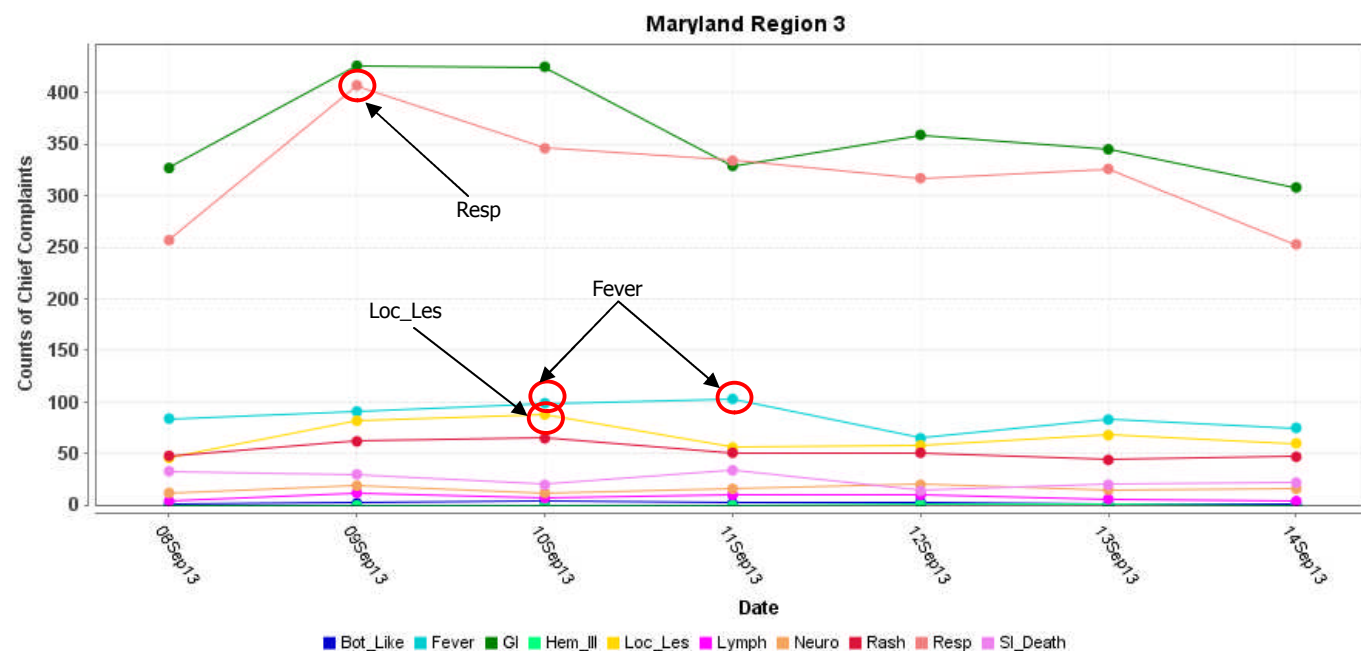


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

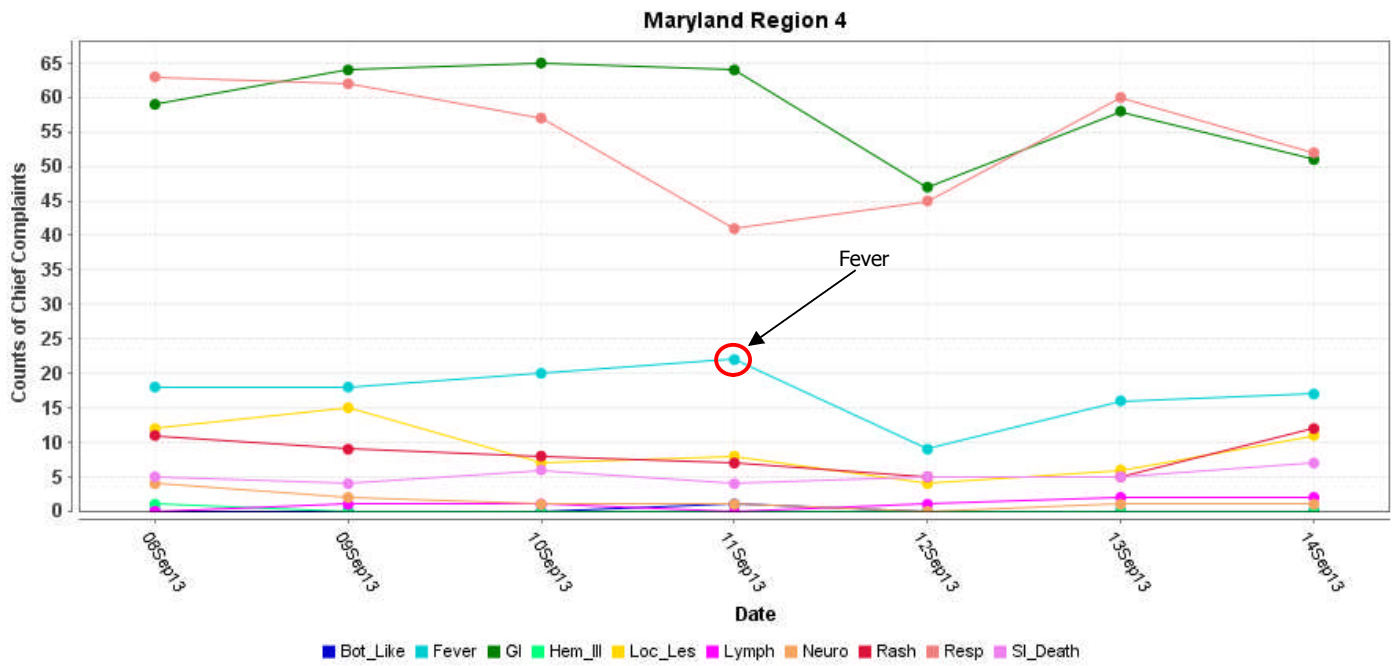
MARYLAND ESSENCE:



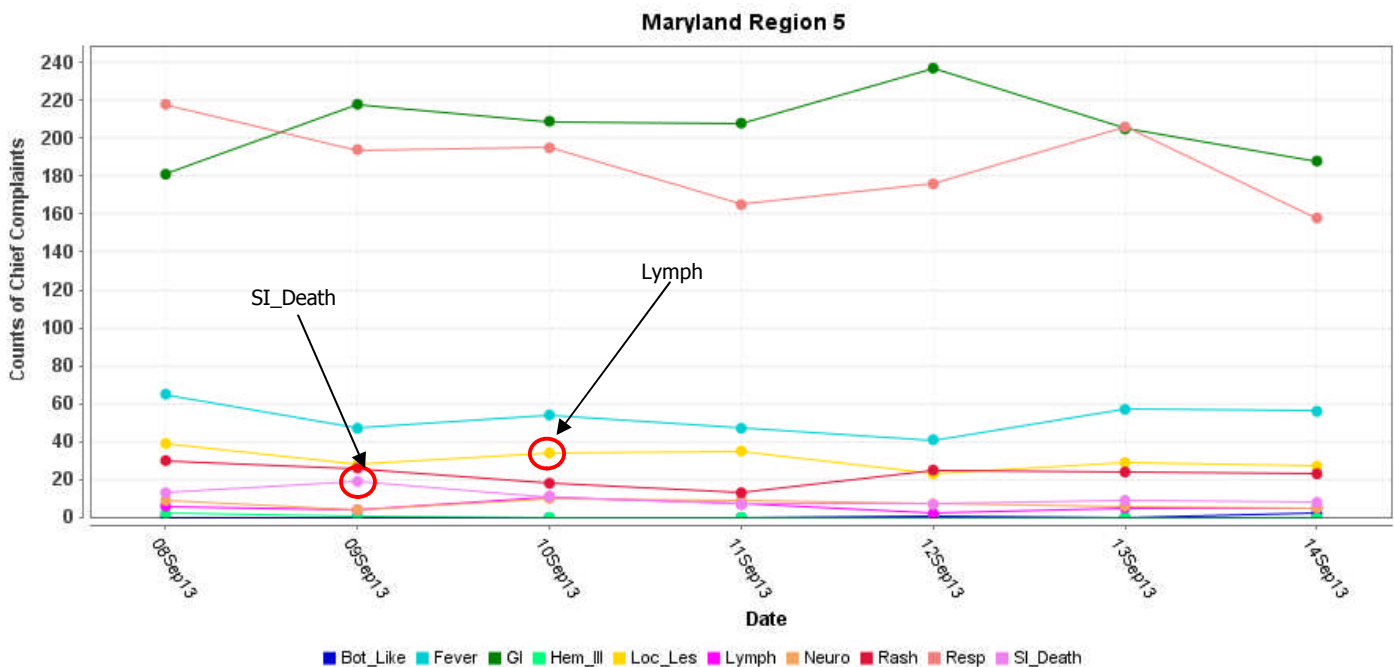
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

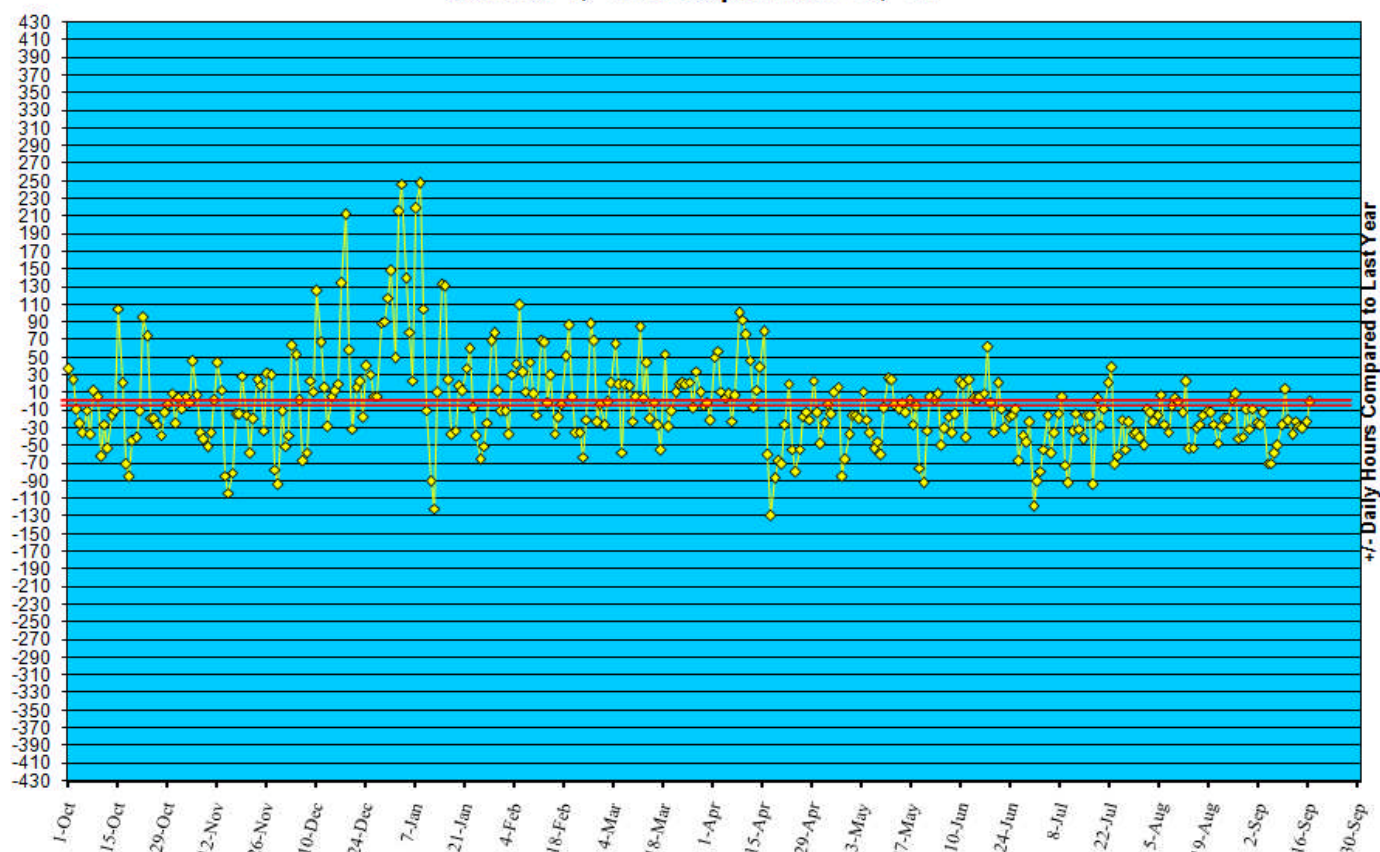


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '12 to September 14, '13



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in August 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

| Meningitis: | Aseptic | Meningococcal |
|--|---------|---------------|
| New cases (September 8 - September 14, 2013): | 13 | 0 |
| Prior week (September 1 - September 7, 2013): | 9 | 0 |
| Week#37, 2012 (September 10 – September 16, 2012): | 18 | 0 |

2 outbreaks were reported to DHMH during MMWR Week 37 (September 8 – September 24, 2013)

2 Rash Illness Outbreak

2 outbreaks of SCABIES in Nursing Homes

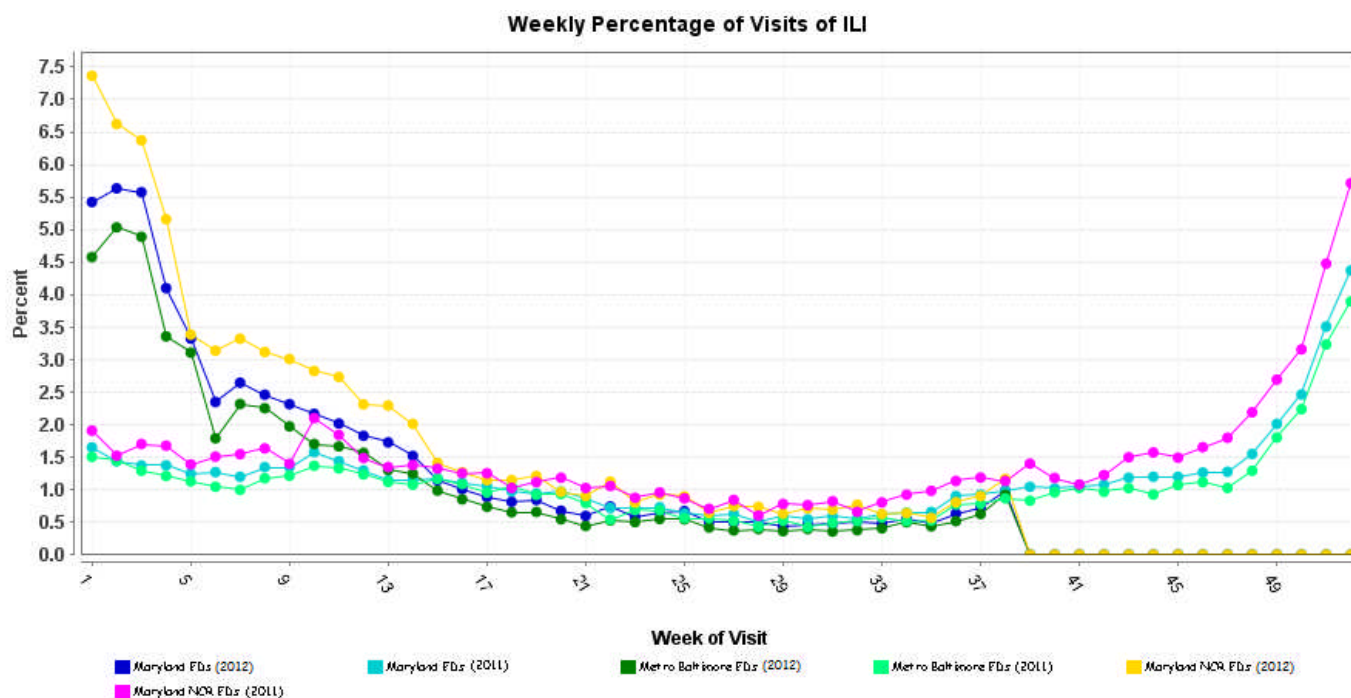
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

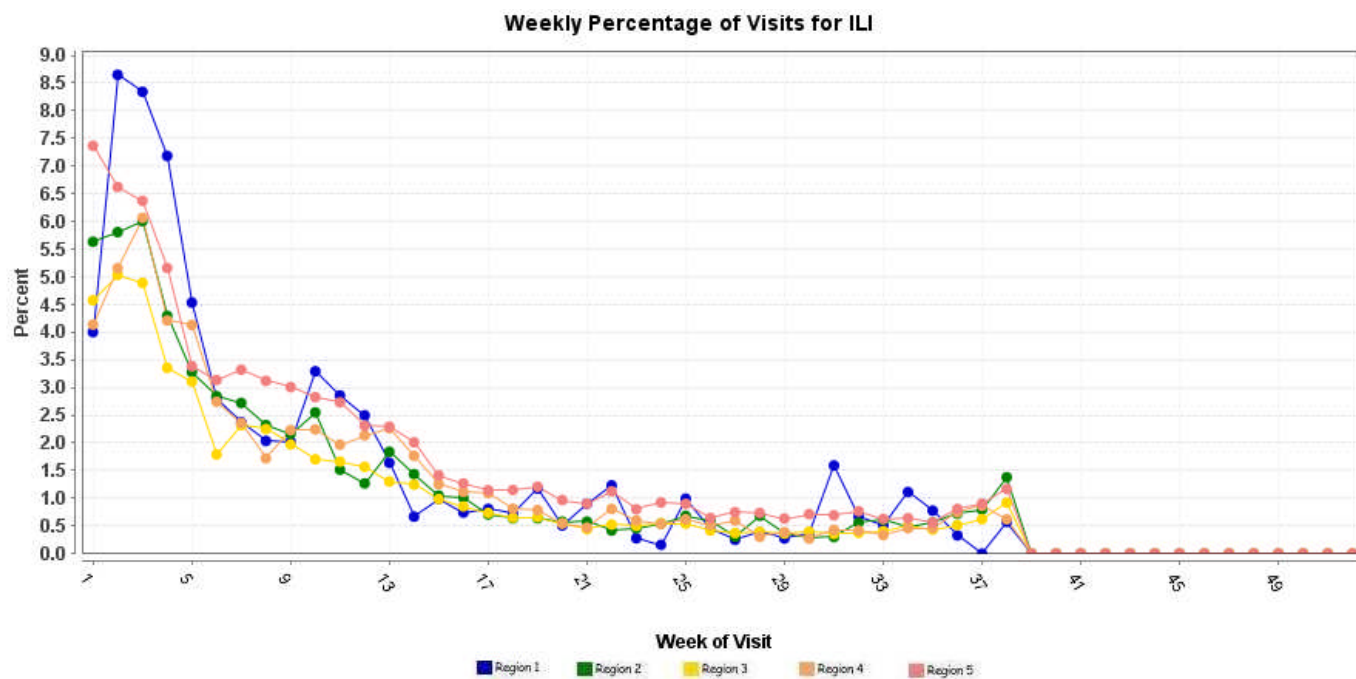
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



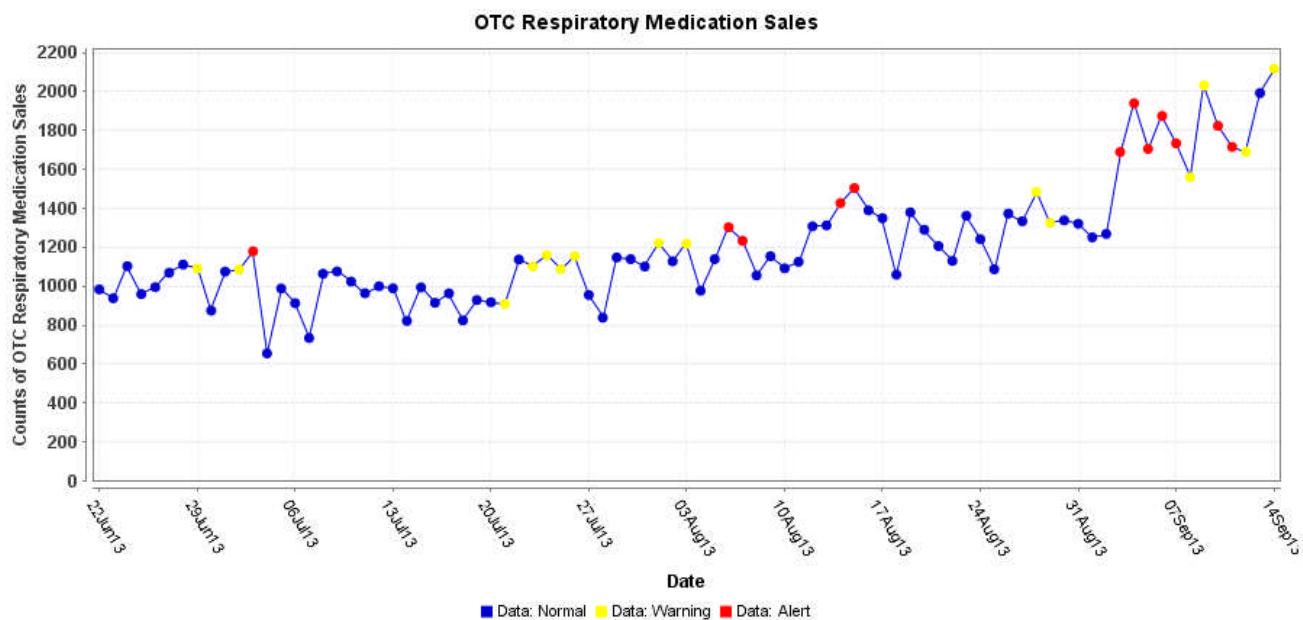
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of August 29, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 637, of which 378 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN, H7N9 (CHINA): 10 September 2013, A new study has found that the novel avian-origin H7N9 influenza A virus, which has recently emerged in humans, attaches moderately or abundantly to the epithelium of both the upper and lower respiratory tracts. This pattern has not been observed before for other avian influenza A viruses. The report, published in the October 2013 issue of The American Journal of Pathology, suggests that the emerging H7N9 virus has the potential to cause a pandemic, since it may transmit efficiently in humans and cause severe pneumonia. The 1st report of infections of humans with the influenza A virus of the subtype H7N9 surfaced in March 2013. Three patients from eastern China developed severe pneumonia and acute respiratory distress syndrome and died as a result. By 30 May 2013, the H7N9 infection was confirmed in 132 patients from China and Taiwan, 37 of whom died, according to the World Health Organization. Infected poultry were thought to be the source of the virus. In the current study, investigators focused on the virus' pattern of attachment in order to assess its potential transmissibility and virulence. "Abundant virus attachment to the human upper respiratory tract correlates with efficient transmissibility among humans," explains Thijs Kuiken, DVM, PhD of the Department of Viroscience at Erasmus University Medical Centre in Rotterdam, The Netherlands. "Virus attachment to Clara cells in the bronchioles and pneumocytes and macrophages in the alveoli correlates with high virulence." Using virus histochemical analysis, the investigators looked at the pattern of attachment of 2 genetically engineered emerging H7 viruses (containing the hemagglutinin (HA) of either influenza virus A/Shanghai/1/13 or A/Anhui/1/13) to fixed human respiratory tract tissues and compared the findings to attachment patterns seen with human influenza viruses with high transmissibility but low virulence (seasonal H3N2 and pandemic H1N1) and highly pathogenic avian influenza (HPAI) viruses with low transmissibility and high virulence (H5N1 and H7N7). They found that like other avian influenza viruses, the H7N9 viruses attached more strongly to lower parts of the human respiratory tract than to upper parts. However, compared to other avian influenza viruses, the attachment to epithelial cells by H7N9 in the bronchioles and alveoli of the lung was more abundant, and the viruses attached to a broader range of cell types. "These characteristics fit with increased virulence of these emerging avian H7 viruses compared to that of human influenza viruses," says Dr. Kuiken. A 3rd notable finding was a more concentrated attachment of H7N9 viruses in ciliated cells of the nasal concha, trachea, and bronchi, suggesting the potential for efficient transmission among humans. "However, the fact that the emerging H7N9 virus has caused infection mainly in individual human cases suggests that it has not acquired all the necessary properties for efficient transmission among humans," notes Dr. Kuiken. "Our results indicate that based just on the pattern of virus attachment, the H7N9 currently emerging in China has the potential both to cause severe pulmonary disease and to be efficiently transmitted among humans," says Dr. Kuiken. He emphasizes that attachment is only the 1st step in the replication cycle of influenza virus in its host cell, and that other steps, as well as the host response, need to be taken into account to fully understand the potential of these emerging H7 viruses to cause an influenza pandemic.

NATIONAL DISEASE REPORTS*

E. COLI EHEC (GEORGIA): 09 September 2013, North Georgia health officials are convinced that [enterohemorrhagic] *E. coli* made someone in Walker County sick and now have the daunting task of finding the source and if anyone else has come in contact with the bacteria. Last weekend, 2 people reported signs of HUS (hemolytic uremic syndrome), a type of disease linked to *E. coli*, but so far only one case was positive for this group of bacteria. Logan Boss with the health department says each case is reported and examined immediately. "It is a very serious disease. Anyone can get it and it is a rare disease more common in children than adults," says Boss. Boss wouldn't say if the victims were small children, but says these are the only HUS cases in North Georgia in 2013. Channel 3 has confirmed the 2 HUS cases are food-related. The health department says the 2 cases of HUS are isolated and there is no public threat. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

VIBRIO PARAHAEMOLYTICUS (MASSACHUSETTS): 10 September 2013. All oyster farms in Katama Bay were ordered shut on Mon 9 Sep 2013 by the Massachusetts Department of Public Health (DPH) because of bacterial contamination that has caused at least 3 confirmed cases of illness on Martha's Vineyard, according to Edgartown shellfish constable Paul Bagnall. DPH ordered a recall for all oysters shipped from Katama Bay after 1 Aug 2013. "We recognize the impact these actions have on many of our local businesses, and we do not take them lightly," said Cheryl Bartlett, Massachusetts Commissioner of Public Health in a news release. "We will continue to partner with federal and local health officials and industry to ensure the public's health and safety." Mr. Bagnall said he expects oyster production from 12 active farms in the bay to be curtailed for at least 4 weeks. The July through December period is the most productive and lucrative harvest time for Katama Bay oyster farmers, Mr. Bagnall said. Production approaches 5 million commercially harvested oysters annually. Mr. Bagnall said the bacteria could threaten the entire industry. "If I owned a farm, I would be really worried about 2014," he said. Similar outbreaks have forced closure of aquaculture operations on Cape Cod, Plymouth Bay, and in Connecticut this summer [2013]. The bacterium that prompted the shutdown of Katama Bay farms is *Vibrio parahaemolyticus*. A naturally occurring bacteria that thrives when water temperatures get warmer than 81 F, it can live and reproduce in temperatures as low as 60 F, either in the ocean or in the shells of harvested oysters. The bacteria causes severe stomach distress. In 2012, there were 9 confirmed cases of illness from *V. parahaemolyticus* statewide, according to DPH. The illnesses prompted regulators to order a control plan for the 2013 season. The plan included earlier icing of the shellfish after harvest, among other precautions. But with 3 cases confirmed at the Martha's Vineyard Hospital in recent weeks, DPH ordered production shut down. "If you get a confirmed case, there are probably some cases out there; either people didn't present, or didn't feel it was necessary to go to the hospital, or doctors missed it," Mr. Bagnall said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

PLAGUE (NEW MEXICO): 10 September 2013, The New Mexico Department of Health announced today, 10 Sep 2013, a probable case of plague in an 11-year-old girl from Torrance County. Preliminary test results at the Department's Scientific Laboratory Division were positive. Confirmatory testing is pending. This is the 2nd human case of plague in New Mexico and in the USA in 2013. An environmental investigation will take place at the girl's home to look for ongoing risk to others in the surrounding area. "Everyone needs to avoid sick or dead rodents and rabbits and their nests and burrows," said Department of Health Secretary Retta Ward, MPH. "Families should also talk to their veterinarian about an appropriate flea product for their pets." Plague is a bacterial disease of rodents and is generally transmitted to humans through the bites of infected fleas but can also be transmitted by direct contact with infected animals, including rodents, wildlife and pets. "Unfortunately, it is not possible to eradicate plague from the rodent population or to totally eliminate risk to residents who live in areas where there is plague," said Dr. Paul Ettestad, public health veterinarian for the Department of Health. "Education about how plague is transmitted to people and what steps can be taken to reduce your risk are key in preventing future cases of this potentially deadly disease."

To prevent plague, the Department of Health also recommends:

- Keep your pets from roaming and hunting.
- Clean up areas near the house where rodents could live, such as woodpiles, brush piles, junk and abandoned vehicles.
- Sick pets should be examined promptly by a veterinarian.
- See your doctor about any unexplained illness involving a sudden and severe fever.
- Put hay, wood, and compost piles as far as possible from your home.
- Don't leave your pet's food and water where mice can get to it.

Symptoms of plague in humans include sudden onset of fever, chills, headache, and weakness. In most cases, there is a painful swelling of the lymph node in the groin, armpit or neck areas. Plague symptoms in cats and dogs are fever, lethargy and loss of appetite. There may be a swelling in the lymph node under the jaw. With prompt diagnosis and appropriate antibiotic treatment, the fatality rate in people and pets can be greatly reduced. Physicians who suspect plague should promptly report to the New Mexico Department of Health. The 1st human plague case in New Mexico this year [2013] was reported in August 2013 in a 15-year-old boy from Torrance County. There was one human plague case in New Mexico in 2012, 2 human cases of plague in 2011, no cases in 2010, and 6 human cases of plague in 2009, one of them fatal. This case of bubonic plague (left femoral lymphadenopathy) had antibiotics prior to any cultures being done, so there was no growth on culture. The case had a significant titer on acute serology (1:128) and along with clinical findings meets the "probable" national case definition. A follow up convalescent serology will be done and if there is a 4-fold increase in titer, this will confirm the case. (Plague is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (TENNESSEE): 09 September 2013, According to the Chattanooga-Hamilton County Health Department, 25 people who ate meals on the UT [University of Tennessee] Chattanooga campus have reported foodborne illness. A spokesperson said the health department has been investigating the case since 26 Aug 2013. They say the victims have reported illness and developed symptoms such as fever, abdominal pain, diarrhea, nausea, and vomiting. The University is fully cooperating with the Health Department's procedures. Inspections of the University's food establishments and a review of their food handling practices and cooking procedures are being conducted, along with interviews and testing of those who reported illness. The unannounced inspections of the University food services revealed no specific problems or mishandling of food and scores of 95 and 99 were received on these inspections. The health department reports that so far there are lab-confirmed cases of salmonellosis and campylobacteriosis. They say those results are "highly suggestive" that the problem was associated with a chicken product but added that "it is uncertain at this time. A specific source of the illness caused by these bacteria has not been identified, but the investigation is ongoing." They say there is no evidence of continuing illness. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

FOODBORNE ILLNESS (USA): 08 September 2013, Greek yogurt maker Chobani has landed in hot water after customers complained over a foul taste and reported feeling ill after eating Chobani yogurts that reportedly contained mold. Chobani notified retailers Friday, 30 Aug 2013, telling them to pull 15 flavors. It did not issue a formal recall, however. Instead, it has been responding to customer complaints via its Facebook page, asking people to email the company. The (Portland) Oregonian said customers complained their yogurt tasted odd and some containers were bloated. Those who consumed the yogurt complained of vomiting and diarrhea. Chobani's Facebook page is filled with testimonials from irate customers who are calling for a boycott, and some commenters are saying their posts have already been deleted. According to Amy Juaristi, a Chobani spokeswoman, the affected yogurts are only those made in one of Chobani's facilities in Idaho. The recalled products are only 5 percent of Chobani's overall production. The yogurt maker is working with its retailers to eliminate certain yogurts from grocery shelves. These cups are those labeled with the code 16-012 and those whose expiration dates range from 11 Sep to 7 Oct 2013. Chobani has not yet stated how many cups or varieties have been contaminated. Juaristi did not say where the tainted yogurt was sold. Meanwhile, the Food and Drug Administration has been notified, though it rarely orders a product recall. Instead, the FDA usually orders companies to contact stores to remove the products and to make the public aware of any suspected problems. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

SALMONELLOSIS (UNITED KINGDOM): 13 September 2013, The source of an outbreak of salmonellosis in Conwy and Gwynedd [Wales] has been potentially linked to cooked ham supplied to small independent butchers. The number of confirmed cases had risen to 57, 36 of them in England. They range from a 7-month-old baby to a pensioner of 87. A total of 9 people have been treated in hospital. The new clusters in England include West Yorkshire, Thames Valley, Cumbria and Lancashire. Experts from Public Health Wales (PHW) have been working with Public Health England, the Food Standards Agency and environmental health officers to find possible links between the cases and trace the source of the outbreak, after it was initially reported in September 2013. The suppliers have still not been traced but the link to cooked ham is common in the cases so far. Dr Judy Hart, consultant in communicable disease control for PHW, said: "The strain of *Salmonella* we are investigating is very unusual so it is highly unlikely that the cases in England and Wales are coincidence. Testing has been carried out on ham supplied to a number of butchers identified as part of the investigation." No trace of salmonella has been found, but other hygiene issues were identified that led to one supplier voluntarily withdrawing certain batches of ham. "A number of lines of inquiry are still being investigated and we continue to monitor the situation," said Dr Hart. "Although it is an unpleasant illness, people who become ill with salmonellosis generally make a full recovery." In September 2013, officials said 5 of the 22 people from north-west Wales, including children, were hospitalized but have since been allowed home. The outbreak began in mid-July 2013, with public health officials saying it was not concentrated on one particular town or locality. The clusters in England include another 8 confirmed cases in West Yorkshire, including 2 people treated in hospital -- according to Public Health England (PHE). Another 8 combined cases are in Cumbria and Lancashire -- which includes an 86-year-old patient

in hospital. There are also 7 cases in the Thames Valley and 5 combined in Bedfordshire and Hertfordshire. Cases have also been reported in places as far apart as the north east of England and Norfolk. Dr Bob Adak, head of the gastrointestinal diseases department at PHE, added: "Investigating outbreaks of food-borne illness is a complex process as people have to try and remember what they ate prior to becoming unwell. "In this instance many reported eating cooked meats. The FSA is following all possible leads along with Environmental Health to try and establish the source of the outbreak. This process is ongoing." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC(UNITED KINGDOM): 13 September 2013, Sainsbury's is recalling all of its own-brand watercress due to an *E. coli* outbreak that has made 18 people ill. 13 of those affected are from England, with 4 in Wales and 1 in Scotland. Some of the victims are being treated in hospital. The Food Standards Agency (FSA) said the supermarket giant was also recalling salads containing watercress. It said the move was a precautionary measure due to a possible association with an outbreak of *E. coli*. No other Sainsbury's supermarket products are known to be affected. The FSA said: "(Sainsbury's) is advising people not to consume any of these products and to return them to the store they were purchased from for a full refund. "Investigations by the Food Standards Agency, Public Health England and local authorities are continuing, and further information will be provided once it becomes available. Sainsbury's has informed the FSA that it is carrying out testing on all of its affected lines, but that no trace of *E. coli* O157 has been detected to date." Public Health England said the outbreak was mainly affecting people over the age of 50 and interviews with those affected "revealed a strong link to the consumption of watercress", with most saying they had bought it at Sainsbury's. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX (KYRGYZSTAN): 11 September 2013, The Kyrgyz village of Yntymak (located in the Talas region, northwest of the country) has been quarantined due to an outbreak of anthrax, according to the head of the department of supervision and prevention of infectious diseases. Quarantine will last until 21 Sep 2013. "These measures are taken to control the movement of farm animals. For 2 weeks, no livestock or poultry may be moved from the village," explained the clerk. According to her, to date, Talas oblast hospital has received 16 people with suspected anthrax. In 2 of these patients, the diagnosis has been confirmed; 5 were negative, and 9 more are awaiting the results of laboratory tests. The outbreak of anthrax in the Talas region became known in early September 2013. According to the "Evening Bishkek," Manas Moldaliev, the regional center director for general practice, said that on 22 and 30 Aug 2013, the Yntymak villagers killed cattle, and all those who took part in it and took the meat, are now in the hospital. The animals are believed to have been sick, but none of the villagers showed them to their veterinarian at slaughter or since then. The publication notes that the locals tried to hide the diseased cattle because the state has refused to pay them compensation for their deaths. (Anthrax listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

FOODBORNE ILLNESS (SERBIA): 10 September 2013, 180 patients checked into "Sveti Luka" hospital in Smederevo yesterday [9 Sep 2013] with symptoms of food poisoning, reported RTS. 48 were admitted to the hospital. The exact cause of illness is still unknown. The head of the children's department Dr. Slavica Andjelkovic said that their department admitted a large number of children during the night, but due to limited capacity of the hospital, those with lighter symptoms were released for home treatment. 13 children were kept for treatment in the hospital, 2 in the department for infectious diseases, she said, adding that all pediatric patients are feeling better, but stressed that, by morning, new children came with the same symptoms. However, Dr. Andjelkovic said it is expected that most of the children will be released to home treatment after receiving therapy. Among the patients who were kept for treatment in the hospital were 2 pregnant women. Director of the hospital Dr. Goran Kuljanin said that they will most probably be released home after receiving treatment. Most of the patients ate hamburgers in several places in the city, while a few of them ate pizza. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (ENGLAND): 09 September 2013, Campaigners demanded a public inquiry today after 4 cases of potentially deadly legionnaires' disease were confirmed in South London. The cases have surfaced in Croydon but no link between them has yet been established. The 4 patients are understood to be undergoing treatment at Croydon University Hospital. Cases are being investigated jointly by Public Health England, Croydon council, and Croydon Health Services NHS Trust. Tests have already established that 2 of the cases have different strains from each other. Dr Barry Walsh, a director of health protection for Public Health England, said: "We have been pursuing all potential sources of infection and taking histories of the movements of patients. There is no current link between any of these 4 cases [that] would suggest a common source of infection." Legionnaires' disease is a serious lung infection, caused by bacteria, [which] can lead to pneumonia. Initial symptoms include a flu-like illness with muscle aches, tiredness, headaches, dry cough, and fever. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

MERS-COV (SAUDI ARABIA): 08 September 2013, Within the framework of the constant monitoring and epidemic surveillance of the novel coronavirus (MERS-CoV), the Ministry of Health (MOH) has announced that 3 confirmed cases have been recorded. The 1st case is a 74-year-old female citizen in Hafr Al-Batin who was in contact with a confirmed case of this virus. The new case is suffering from various chronic diseases, and she is currently at the ICU. The 2nd case is a 64-year-old female citizen in Riyadh who also has been suffering from various chronic diseases, and she is currently at the ICU receiving the proper treatment. The 3rd case is a 75-year-old female citizen in Riyadh who has been suffering from chronic respiratory diseases, and she is now receiving the proper treatment, but her health status is stable. Within the same vein, MOH has announced the death of a 74-year-old case, a male citizen in Madinah, who was in contact with a confirmed case. MOH also calls on everyone to visit the website for this disease; in order to recognize it, its symptoms, and prevention methods against it, see the following link: <http://www.moh.gov.sa/CoronaNew>. (Emerging infectious diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website:
<http://preparedness.dhmf.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmf.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

| Syndrome | Definition | Category A Condition |
|----------------------------|--|----------------------------------|
| Botulism-like | ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point. | Botulism |
| Hemorrhagic Illness | SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria | VHF |
| Lymphadenitis | ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck) | Plague (Bubonic) |
| Localized Cutaneous Lesion | SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease | Anthrax (cutaneous) Tularemia |
| Gastrointestinal | ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome | Anthrax (gastrointestinal) |

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

| Syndrome | Definition | Category A Condition |
|--------------------|---|--|
| Respiratory | <p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p> | <p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p> |
| Neurological | <p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p> | Not applicable |
| Rash | <p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p> | Smallpox |
| Specific Infection | <p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p> | Not applicable |

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

| Syndrome | Definition | Category A Condition |
|---|--|-----------------------------|
| Fever | <p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p> | Not applicable |
| Severe Illness or Death potentially due to infectious disease | <p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p> | Not applicable |

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CENTERS FOR DISEASE CONTROL AND PREVENTION**

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